			ling and processing of the FlowCAM dataset		
e note that over the ye	ears several aspects of the sampling an	d processing have been fine-tuned	l and optimized.		
17					
Sampling	started May 2017				
	replicates	1 sample/station			
	volume_filtered	50L or 70L	depending on what was possible (suspended matter clogging the net, time constraints,)		
	sampling_method	buckets			
	sampling_depth	surface water			
	Apstein_net	55µm	1.2 m long and 0.50 m diameter		
	fixative	neutral Lugol iodine's solution	https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
	concentration_fixative	2-5%	Cognac color		
	storage	4°C, dark			
Processing	objective	4x			
	flowcell	300FC			
	collimator	no			
	syringe_pump	5 ml			
	pipette_tip	5 ml			
	filter_mesh_size	300 μm	Pre-filter before sample is processed to avoid flowcell clogging.		
	flow_rate	1,7 ml/min			
	autoimage_rate	20 fps			
	sampling_volume	5ml			
	stop_criterium	1500 particles or 5ml			
	pseudoreplicates	3 runs/sample	Between each run and each sample, the system is flushed with 3x 5ml distilled water and 3x ethanol 70% (alternating, ending with distilled water		
	focus	manual	, 0,		
	camera	Sony XCD SC90			
	color_grade_camera	grey scale			
	flowcam model		roscope (FlowCAM®) VS-4 (Fluid Imaging Technologies, Yarmouth, Maine, U.		
	processing_time	5 min/run	30 min/sample total		
	imaging_mode	Autoimage mode	, 1		
	PPUI	1.10-1.20			
	Basic aquisition filter	50-300 ESD			
	software	VisualSpreadsheet®			
		Version 4.2.52.			
Labeling	VisualSpreadsheet				
			•		
Sampling	replicates	1 sample/station			
	replicates volume_filtered	1 sample/station 50L or 70L	depending on what was possible (suspended matter clogging the net, tim constraints,)		
	volume_filtered	-			
	volume_filtered sampling_method	50L or 70L buckets			
	volume_filtered sampling_method sampling_depth	50L or 70L  buckets  surface water	constraints,)		
	volume_filtered sampling_method	50L or 70L  buckets surface water 55μm neutral Lugol iodine's			
	volume_filtered  sampling_method sampling_depth Apstein_net	50L or 70L  buckets  surface water  55µm	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution 2-5%	constraints,)  1.2 m long and 0.50 m diameter		
Sampling	sampling_method sampling_depth Apstein_net fixative	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution 2-5% 4°C dark	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective	50L or 70L  buckets surface water 55µm neutral Lugol iodine's solution 2-5% 4°C dark  4x	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell collimator	50L or 70L  buckets surface water 55µm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC no	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell collimator syringe_pump	buckets surface water 55µm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC no 5 ml	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell collimator syringe_pump pipette_tip	buckets surface water 55µm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC no 5 ml 5 ml	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739  Cognac color		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell collimator syringe_pump pipette_tip filter_mesh_size	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC no 5 ml 5 ml 300 μm	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739		
Sampling	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell collimator syringe_pump pipette_tip filter_mesh_size flow_rate	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC no 5 ml 5 ml 300 μm 1,7 ml/min	constraints,)  1.2 m long and 0.50 m diameter  https://www.chemlab-analytical.be/#/en-gb/prod/1392739  Cognac color		
	volume_filtered  sampling_method sampling_depth Apstein_net fixative  concentration_fixative storage  objective flowcell collimator syringe_pump pipette_tip filter_mesh_size	50L or 70L  buckets surface water 55μm neutral Lugol iodine's solution 2-5% 4°C dark  4x 300FC no 5 ml 5 ml 300 μm	1.2 m long and 0.50 m diameter https://www.chemlab-analytical.be/#/en-gb/prod/1392739  Cognac color		

	pseudoreplicates	3 runs/sampled	Between each run and each sample, the system is flushed with 3x 5ml distilled water and 3x ethanol 70% (alternating, ending with distilled water).
	focus	manual	alletined water and ox estimatory oyo (area mating) estamble matery.
	camera	Sony XCD SC90	
	color grade camera	grey scale	
	flowcam model		croscope (FlowCAM®) VS-4 (Fluid Imaging Technologies, Yarmouth, Maine, U.S.A.)
	processing_time	9 min/run	30 min/sample total
	imaging_mode	Autoimage mode	30 mm/sumple total
	PPUI	1.10-1.20	
	Basic aguisition filter	50-300 ESD	
	software	VisualSpreadsheet®	
	Software	Version 4.2.52.	
Labeling	Visual Spreadsheet	Version n.z.sz.	
019-2020			
Sampling			
	replicates	1 sample/station	
	volume_filtered	50L	
	sampling_method	buckets	
	sampling_depth	surface water	
	Apstein_net	55μm	1.2 m long and 0.50 m diameter
	fixative	neutral Lugol iodine's solution	https://www.chemlab-analytical.be/#/en-gb/prod/1392739
	concentration fixative	2-5%	Cognac color
	storage	4°C dark	
Processing			
	objective	4x	
	flowcell	300FC	
	collimator	no	
	syringe_pump	5 ml	
	pipette tip	5 ml	
	filter mesh size	300 μm	Pre-filter before sample is processed to avoid flowcell clogging.
	flow rate	1,7 ml/min	1 1 50 0
	autoimage rate	20 fps	
	sampling volume	8ml	
	stop criterium	1500 images or 8ml	
	pseudoreplicates	3 runs/sample	Between each run and each sample, the system is flushed with 3x 5ml
	pocaacropmoacco	o rans, sampre	distilled water and 3x ethanol 70% (alternating, ending with distilled water).
	focus	manual	
	camera	Sony XCD SC90	
	color_grade_camera	grey scale	
	flowcam_model		croscope (FlowCAM®) VS-4 (Fluid Imaging Technologies, Yarmouth, Maine, U.S.A.
	processing_time	9 min/run	30 min/sample total
	imaging_mode	Autoimage mode	
	PPUI PPUI	1.10-1.20	
	Basic_aquisition_filter	50-300 ESD	
	software	VisualSpreadsheet® Version 4.2.52.	
Labeling	CNN + manual validation	1	